

**RECEIVED
CENTRAL FAX CENTER**

APR 02 2008

REMARKS

Applicants wish to thank the Examiner for the careful consideration given this application. Claims 1-7 are pending in this Application.

Applicants request the Examiner take notices that Paragraphs 2, 3 and 4 of the current Office Action do not apply to the pending application.

Rejections under 35 U.S.C. § 103

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,706,804 to Resendes in combination with U.S. Patent No. 6,608,125 to Cruse et al. (hereinafter "Cruse"). Applicants traverse this ground of rejection.

It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970).

The Examiner alleges that it would have been obvious to one of ordinary skill in the art to modify the filled halobutyl elastomer of Resendes by replacing the silazane compound with the blocked mercaptosilanes compounds of Cruse. The Examiner alleges such modifications would have been obvious because one would have expected that the use of a filled rubber composition as taught by Resendes to be similarly useful and applicable to the filled rubber composition taught in Cruse. Applicants respectfully disagree.

Applicants note that the Examiner suggests that since the cited art both teach silica filled compound that it would be obvious to combine the technologies. Applicants respectfully disagree and note that filled compounds, especially, silica filled compounds

CH-8354

-4-

based on butyl rubber are common and that commonality alone does not predict the technology disclosed in Cruse would be applicable to Resendes.

Resendes discloses the use of a silazane in a filled halobutyl elastomer compound. In the alternative Cruse discloses the use of sulfur silane coupling agents in the manufacture of rubbers. As noted previously, Cruse is silent with regard to halobutyl elastomers and only generally describes butyl rubber by mentioning the technology can be applied to organic rubber compositions which are comprised of at least one diene-based elastomer. Applicants submit the Examiner fails to recognize the differences in curing halobutyl rubber compound and non-halogenated rubber compounds. Examples 3, 5 and 7 of the present invention demonstrate the inability of the NXT silane to overcome the inherent low reactivity of commercial grades of butyl rubber (i.e., non-halogenated butyl). The physical properties are poor (for example tensile properties, abrasion properties) due to the reduced cure state in these compounds. It is only the halogenated butyl samples which can be used to generate superior compounds. This demonstrates the inherent differences between regular butyl grades and halogenated butyl grades (specifically brominated butyl rubbers) and illustrates why one skilled in the art would not have been motivated to combine the teachings of Resendes and Cruse.

Applicants submit there would have been no expectation that one skilled in the art could successfully combine Resendes and Cruse and arrive at the claimed invention. Applicants submit that one skilled in the art, based on the teaching of the references, would have found it counterintuitive to combine the blocked silane of Cruse with the halobutyl elastomer of Resendes because one skilled in the art would expect the silazane of Resendes to act as an alternative blocking agent towards the blocked silanes. Additionally the use of amino alcohols in combination with a silazane and a blocked silane would exacerbate the scorch problems. Therefore it is not obvious from the two teachings to try blocked silanes in halogenated butyl rubber compounds without further modifications of the system. Applicants remind the Examiner there is nothing in the statutes or the case law which makes "that which is within the capability of one skilled in the art" synonymous with obviousness. *Ex Parte Gerlach and Woerner*, 312 USPQ 471 (Pat. and Trademark Office Bd. App. 1980).

CH-8354

-5-

Also, Applicants submit the Examiner must recognize that silazanes and blocked silanes are different classes of chemicals and therefore react differently when cured. In general, silazanes are used as a hydrophobizing agent to react with the surface of a silica filler. These chemicals could also react with sulfides, which would serve to hinder the use of the blocked mercaptosilane coupling agents and it is not predictable that you could arrive at the present invention.

Applicants again stress that only the present invention teaches the success of the present invention and Applicants submit the properties of the present invention are unexpected in view of the cited art. The comparison of the tensile properties for the Examples in Table 1 (M200 and Elongation at Break) of the present invention, indicate differences which are not predicted by Cruse, Resendes or a combination thereof. Cruse teaches the use of blocked silanes which require a deblocking agent during the sulfur vulcanization stage while the present invention clearly shows that nonsulfur cures in the presence of halogenated butyl rubber and blocked silane provide much improved properties over the cases where butyl rubber alone or butyl rubber in the presence of blocked silanes is used. These are surprising and unexpected results, which are not taught by either Resendes or by Cruse (and are not suggested by the combination of Resendes and Cruse).

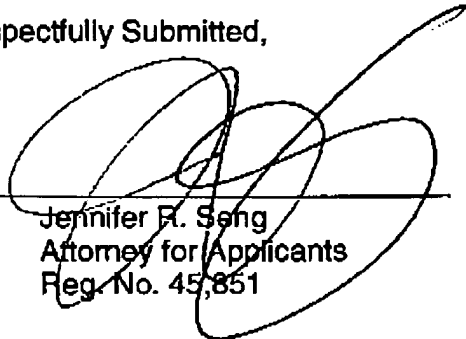
Neither Resendes nor Cruse teach or suggest nonsulfur cures with either silazane or with blocked silanes so it is not obvious from these teachings that blocked silanes in the absence of silazane and deblocking agent would give improved properties.

In view of the foregoing remarks, Applicants submit that the pending Claims are in condition for allowance and respectfully request notice to such effect. Should the Examiner have any questions regarding the current claimed invention, he is invited to initiate a telephone conference with the undersigned.

Please note, the USPTO is hereby authorized to charge any fees which may be required by this paper and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully Submitted,

By



Jennifer R. Song
Attorney for Applicants
Reg. No. 45,851

LANXESS Corporation
Law & Intellectual Property Department
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15275-1112
(412) 809-2233
FACSIMILE PHONE NUMBER:
(412) 809-1054

\\sr\S:\Law Shared\SHARED\JRS\PATENTS\8354\Response 4 1 07.DOC

CH-8354

-7-